

Memo

24 October 2019 | HBEFA41_Update_October2019.docx

To Users of HBEFA 4.1

By The HBEFA team (hbefa@infras.ch)

Subject **HBEFA 4.1 October 2019 update**

What is the reason for the update?

The HBEFA 4.1 October 2019 update became necessary for two reasons:

- Fuel mix data for Norway were missing from the HBEFA 4.1 initial release. This caused CO₂, SO₂ and Pb emission factors for Norway to be zero.
- The fleet model for Austria contained partly incorrect introduction times of vehicles with certain emission standards. This led to incorrect average emission factors at higher aggregation levels.

With the update, two other minor issues were also addressed, which by themselves would not have necessitated an update (see next paragraph).

What is new in the update?

- Fuel mix data for Norway have been integrated;
- The fleet composition for Austria has been revised based on corrected introduction schemes of emission standards;
- Aggregate traffic situations for Austria have been updated;
- NH₃ emission factors for LPG passenger cars have been added based on the EMEP/EEA 2018 Guidebook on road transport emissions.

How are previously extracted results affected?

- For Norway:
 - CO₂, Pb, SO₂ emission factors, which had values of zero before the update, are now correct.
 - HC emissions are up to 10% higher, since the missing fuel mix data before the update prevented a correct calculation of evaporation diurnal emissions, which depend on the fuel mix.
- For Austria:
 - Detailed/disaggregated emission factors at the level of subsegment and individual traffic situation are not affected;

- Emission factors for aggregate traffic situations or fleet aggregates (e.g. at technology and vehicle category level) are different due to the different shares of traffic situations and emission standards in the fleet.
- All countries: NH3 emission factors are now also available for LPG passenger cars. Other emission factors are not affected.

How is the update installed?

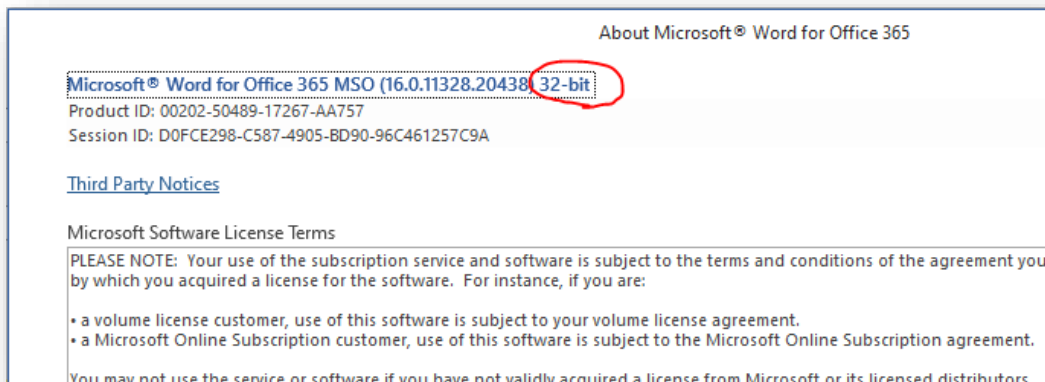
There are two ways to install the update:

a) Complete uninstallation and re-installation of HBEFA 4.1:

- If you want to keep your previously extracted results, open HBEFA 4.1, check under menu *Info > Settings* where the “USER-Database” is saved, and copy that file (“HBEFA41_User.mdb”) to another location (NOT under C:\Program files...).
- Uninstall the current HBEFA 4.1 like any other application via Windows Control Panel or Settings.
- Log in to your account at www.hbefa.net and download the updated installer (“HBEFA41_PubVersion_Oct2019.zip”)
- Unzip, then double-click the extracted “HBEFA41_PubVersion.exe” and follow the instructions of the installation wizard.

b) Manual replacement of affected files:

- Open HBEFA 4.1, check under menu *Info > Settings* the installation paths of
 - a) the “Program” database (“HBEFA41_Prog.accde”)
 - b) the “SYSTEM-Database” (“HBEFA41_System.mde”)
 Note down these paths.
- If you have MS Office installed on the target computer, check its “bitness” (i.e. whether it’s 32- or 64-bit) by opening any MS Office application (Word, Outlook, Excel, ...), going to menu *File > Account > About <application>*. This will open a window that specifies the “bitness” at the end of the first line of text:



- Log in to your account at www.hbefa.net and download the appropriate Zip file for your bitness “HBEFA41_PubVersion_Oct2019_updatedFiles_32bit.zip” or “HBEFA41_PubVersion_Oct2019_updatedFiles_64bit.zip”.
- Unzip/extract the “HBEFA41_Prog.accdc” and “HBEFA41_System.mde” from the downloaded Zip file
- Copy the extracted files to the installation paths of both databases, OVERWRITING the old files. (Alternatively, first rename the old files by adding e.g. a suffix “_OLD” so there is no name conflict with the new files, then copy the new files).